

UTAH STATE BUILDING BOARD

PUBLIC HEARING

Performance Based Procurement System

March 15, 2000

10:00 a.m.

State Office Building Auditorium
Salt Lake City, Utah

The Chairman of the Utah State Building Board, Mr. David Adams, convened the public hearing, stating that the State Building Board is empowered to supervise the acquisition of real estate, the construction of State buildings and the renovation and maintenance of existing buildings. The Building Board is responsible to oversee that in the most efficient way possible and within the reasonable cost budget for the buildings that are developed. The Building Board has done a number of things to improve the product delivery and hopefully provide the taxpayers with greater value.

Putting the design/build system and the Performance Based Procurement System (PBPS), which we have been experimenting with on several projects. The Building Board has concluded that is time that we develop firm policies pertaining to the PBPS, which is the reason for the public hearing. The chair mentioned that the Building Board has completed its business for the month of March at a meeting that began at 8:00 am on March 15, 2000, and that hearings would now proceed.

Chairman Dave Adams introduced Mr. Haze Hunter, Mrs. Lynne Ward, Mr. Keith Stepan, Mr. Joe Jenkins, Ms. Kay Waxman, and Mr. Chuck Canfield.

Chairman Adams mentioned that the Building Board invited the professional organizations to provide testimony pertaining to PBPS. The Building Board received responses from six professional organizations. The presenters were limited to 15 minutes. Some of the presenters had previously submitted to the Building Board their testimony in writing. The Building Board requested that they begin with an executive summary of their comments and add any other commentary they see fit, allowing time for questions from the Building Board.

The order of scheduled presenters for the morning session is as follows:

<u>NAME</u>	<u>TITLE</u>	<u>AGENCY</u>
Alan J. Peterson	Chairman, Building Committee	Associated General Contractors of Utah
Paul Summers	Officer	Consulting Engineering Council of Utah
Barry Smith	President	AIA Utah
Anthony B. Madsen	President	Sheetmetal Contractors Association
Jim Greenwell	President	Utah Roofing Contractors Association
Robert G. Bergman	Executive Director	Utah Mechanical Contractors Association

Independent individual presenters were invited to make their feelings known in five minutes or less to the Building Board after the lunch break.

The order of pre-scheduled individual presenters for the afternoon session is as followed:

<u>NAME</u>	<u>TITLE</u>	<u>AGENCY</u>
Mike Hogan	President	Hogan and Associates Construction, Inc.
Lanny Krebs	Estimator	C&A Construction, Inc.
Lonnie Ballard	President	Jacobsen Construction
Andrew J. Seppi	Vice President	Utah Tile and Roofing, Inc.

Neil Spencer	President	Bennion and Associates
Kraig S. Clawson	President	Innovative Roofing Consultants, Inc.
Jim Pehkonen	General Manager	Yamas Controls
Jackie McGill	Business Development	Spectrum Professional Services
John Dennis	Facilities Manager	Ogden-Weber Applied Technology Center
Tony Wegener	Chairman of the Board	Architectural Design West, Inc.

The chair invited other individuals to present at the public hearing.

Mr. Hunter expressed the feeling of the Building Board that the hearing process be inclusive. Anyone who wants to be included should be. Mr. Hunter alerted the audience to a sign-up sheet, allowing individuals to testify if they desire.

The chair expressed his desire to conclude the public hearing by 3:30 p.m.

The chair mentioned his pleasure at having members of the Utah State Legislature present, and extended a particular welcome to Rep. Gerry Adair, Co-Chairman of the Capital Appropriations Committee. The chair acknowledged Mr. Adair for bringing PBPS to the attention of the Building Board as a result of a legislative conference he attended. The chair acknowledges another Capital Appropriations Committee member present, Rep. Lorraine Pace. The chair expressed his pleasure at the presence of Dean Kashiwagi, Ph.D., of Arizona State University, who is the founder of performance-based procurement. The chair announces that Utah is one of several states and federal agencies using the performance-based procurement process. The Building Board acknowledged that the process of implementing performance-based procurement is ongoing and will be refined and utilized as it best fits the needs of the Building Board's customers, the state agencies; and the Building Board's suppliers, the professional organizations and contractors.

The chair invited Mr. Rich Byfield, Director of DFCM, to present a brief overview of PBPS.

REMARKS OF RICHARD BYFIELD

Mr. Byfield thanked the Building Board for taking the opportunity to receive input on Performance Based Procurement. Mr. Byfield hesitated to mention that Performance Based Procurement will be future practice. The hearing is part of the learning and absorption process undertaken by DFCM.

Mr. Byfield proceeded with the mission statement of the Building Board: "The Building Board serves as a policy board to assess and prioritize state capital facility needs, to abrogate high-quality facilities that are safe and economical, and to oversee the planning, design, construction, and maintenance of the State's capital facilities." This mission statement was generated in the last several months. DFCM understands its responsibilities to ensure that the State of Utah and its citizens receive full-value for every capital outlay dollar spent. That is an adjustment from the standpoint of what DFCM does. DFCM's major question is whom do they hire to ensure this level of quality? One of the debate points that has occurred in recent meetings is the question: "Is every company or person equal?" The truth is that companies and people are not equal. Any independent organization has a certain quality but each person does receive different responsibilities for different wages. The question is how best to hire the talent.

Mr. Byfield referred to a chart entitled "Policy Requirements v. Project Responsibility," calling it a Decision Model, using the terminology of Dr. Kashiwagi. In this model, the State of Utah should be the highest level accountable for policy requirements. People who take more of a project responsibility begin with the design services side and ultimately to the contractors, who are making and delivering the product.

Mr. Byfield discussed the methods DFCM has to retain services. The most apparent one is the sealed bid (low bid) process, the request-for-proposal (RFP) process, and the "multi-step" process. The multi-step process is similar to the RFP process, but broken up into stages. After the first stage, all but the most bona fide competitors are eliminated. Round two is where the low bid is accepted. Qualifications-based selection (QBS), where a fee is negotiated after the most-qualified firm is selected, is the way DFCM retains professional services. The applicable procurement methods for construction are all the previous methods except QBS. For architects, engineers, and consultants, DFCM can only use QBS. Performance-based procurement is a refinement and improvement to the QBS process. By statute, price cannot be entered into a bidding issue with architects, engineers, and consultants. Mr. Byfield mentioned for the audience's perspective, of all issues involving the hiring of services, DFCM is the only agency allowed by statute to use QBS. Another method that has been used is design/build. The RFP method works and is used for the design/build process, and performance-based procurement can be used as a refinement. The objective of DFCM is to dispense with funding as authorized by the Legislature and Governor for quality construction in a timely fashion, ensuring that taxpayers receive full value and for contracted designers, consultants and contractors to design and build new construction.

PBPS is on the table because people viewed DFCM as a non-performing bureaucracy. DFCM has been bound by statute to low-bid construction. Bids are based on price, which assumes construction is a commodity, which it is not. Commodities are price-driven as they are replicable. DFCM acknowledged problems with projects being late and over-budget. A lack of liability in the process resulted in a high yield of change orders. DFCM is attempting to change the quality of work. Currently, performing contractors will no longer bid low-bid work. As a result, DFCM has spent beyond its contingency to handle scope changes and unforeseen conditions. DFCM is putting the alternative of PBPS on the table. The dilemma is that it requires education on the part of participants in the process. This creates struggle. But DFCM strives for the best value, high performance and low management. This requires an information management system. The Building Board is in place to establish the policy and the participation of outside interests to educate the Building Board and work in common so that a common understanding is reached. Education is required to understand the concepts.

Mr. Byfield cited the following projects recently selected using PBPS: The University of Utah Student Housing, Phase II; Southern Utah University Physical Education Building; The Central Utah Corrections Facility Dormitory in Gunnison; an Architect and Engineer Group was selected for the Salt Lake Community College training center, which is the old diesel facility; the Youth Correctional Facilities; and the Department of Corrections Administration Building. A programmer and designer have been hired for the Edith Bowen School at Utah State University in Logan. DFCM will prepare for the Building Board a report on the above projects.

DFCM is looking for a full-information system that assigns performance as a barcode to be recalled, based on previous performance, to find out who the better performers will be. Performance lines will be matched to requirements using computer modeling to determine where firms are. PBPS allows the rating of contractors during and after construction and encourages contractors to submit their best people.

The chair thanked Mr. Byfield for the presentation, and then calls Alan J. Peterson from the Associated General Contractors of Utah.

REMARKS BY ALAN J. PETERSON

Mr. Peterson thanked the Building Board for the opportunity to make this address. Mr. Peterson offered general commentary, leaving more specific commentary to other members of the AGC. The AGC made the Building Board aware that some members are strongly supportive of PBPS, and others are strongly opposed. The AGC has tried to focus on those issues that have been readily accepted by consensus. The AGC offered that PBPS provides an

opportunity for there to be changes in the system of low-bid being the only selection criterion. The AGC believed that the low-bid should not be the only criterion for selection in the delivery of the product. Low-bid should not be excluded from the process, either. Secondly, the AGC did not favor a return to the low-bid system. Third, PBPS has promise and merit, but it is not the only system that should be used. There is a place for PBPS, and there are places where it should not be used. Of the six issues raised in the written statement, Mr. Peterson focused on two:

- 1: The process at this point in time has been more encumbering than typically AGC members have seen from a necessary preparation. The responsibility to gain additional information from customers, architects, subcontractors or others has an associated expense.
- 2: PBPS does not fit with the design/build-related contract. One of myriad challenges fall into the category of the development of the performance criteria established for individual firms, subcontractors, or architects. Among the challenges of design/build, in the development of a line, a general contractor will team up with an architectural team in the design/build process. The development of the line requires the general contractor to send out information sheets and questionnaires to owners, subcontractors, and architects to get the feedback on their performance rating. The same happens with the architectural firms. The challenge is in that contractors may send out line information to several architects either knowingly or unknowingly that he may have that questionnaire be filled out by a future or present-but-unacknowledged competitor. There are ethical and risk issues that are associated with that. The AGC believes that information retrieved in the selection process could be tainted.

Mr. Peterson invited questions from the Building Board.

Mr. Jenkins stated that he appreciates the written comments the AGC provided. Mr. Jenkins stated that he has heard from many sources that reference gathering is a large problem in the process. He stated a claim that other people are using methods such as the distribution of Utah Jazz tickets to gain good references. He asked Mr. Peterson if it was a problem.

The AGC believed that the information being returned about the contractors is inaccurate given the way it is solicited.

Mr. Jenkins mentioned that, in order for DFCM to make selections, that there has to be some references. He invited the AGC to propose a method that would change the rating process so that there are legitimate references.

The AGC did not claim to have all the solutions. The vast majority of the membership agreed that it need not be perfect. The AGC seeks participation in the development of solutions. There are specific situations, like design/build, where PBPS would be inappropriate because of the compromises.

Mr. Jenkins reiterated the AGC's point that gathering information costs the contractors a lot of money. He asked if it is indeed cost prohibitive. Are smaller firms eliminated from the process? How can the process be streamlined so that it would cost less?

Mr. Peterson mentioned that it has to do with the size of the firm and how much they include in proposals. Smaller firms that are represented on the committee have indicated that it can be expensive. Additional information from them would be helpful, but the AGC is aware of some smaller firms that have not participated in bid processes because of the prohibitive cost. Perhaps the amount of criteria needed to establish could be shortened. This may help to encourage the participation of smaller firms.

Mr. Jenkins stated that most contractors and builders see PBPS as a fairly good system. PBPS requires a lot of education.

The AGC drew the analogy that the vast majority of private industry is making selections based on performance-based selection including price. That system is working well. There are some problems in mirroring that while meeting state-required procurement requirements.

Mr. Jenkins acknowledged another comment the AGC has made: the building trades seem to be in agreement with the AGC but the architects seem not to be. Should the process be de-coupled?

Mr. Peterson mentioned that a dialogue has ensued with the consulting engineer- and architect communities. Like design/build not fitting in with PBPS, there may be other issues that need to be examined in each venue. The AGC would agree that the process should be de-coupled as it moves forward. Changes will need to happen rapidly so that the construction community will not be alienated from the process.

Mr. Jenkins mentioned another concern: DFCM is the entity making the selection process and also provides evaluation. Should the Building Board be more involved in the process?

Mr. Peterson mentioned that they know so little about who should be participating at this point in time. He could not assess the will of the membership. Personally, he believed that the membership desires to help participate in deciding when PBPS should and should not be used. The AGC was not prepared to assess the relationship between the Building Board and DFCM.

Mr. Jenkins mentioned that the Building Board is looking from these hearings to establish a written proposal for the operation of PBPS. He invited the AGC for comment. Should PBPS policy be codified? Who would be responsible? How would the program operate? Should the Building Board be the arbitrator of last resort?

Mr. Peterson believed that no one knows enough about PBPS to establish a rule. The membership of the AGC has clearly communicated that there needs to be more experience if a better system be developed. Modifications over time make sense. There is a lot yet to learn about the process.

Mr. Canfield asked Mr. Peterson for an example where PBPS would be the best process and one where low-bid would be the best.

Mr. Peterson mentioned that selection in low-bid is based on the only criterion of the lowest price. Sometimes there is not even a short list. PBPS fits better in a case of design-bid-build in the performance selection where cost is not the only parameter. There may be room for QBS in the contractor community as well.

The chair asked Mr. Peterson if, in the interviews the AGC held with individual contractors, the contractors were experienced in PBPS?

Mr. Peterson mentioned that feedback has been taken from groups with and without experience with PBPS. That range exists among the favorable and unfavorable opinions. The same can be said between large and small contractors. There is a near-unanimous agreement among the membership that the old low-bid selection needs to be improved upon.

The chair thanked Mr. Peterson. He then invited Mr. Paul Summers of the Consulting Engineers Council of Utah (CECU) to offer his testimony.

REMARKS BY PAUL SUMMERS

Mr. Summers thanked the Building Board for the opportunity to testify.

As representatives of CECU, Mr. Summers and others have been in numerous discussions with Mr. Byfield, legislators, the AIA, and the AGC, concerning PBPS. Among the members who contract with DFCM, PBPS is a serious issue. The CECU fully intends to be a good partner with the State in working through the issues and arriving at a solution that satisfies all parties.

The CECU supported the intent language included in the Year 2000 Appropriation Act for DFCM, with one exception that will be pointed out later. That language reads:

“It is the intent of the Legislature that the Division of Facilities Construction and Management be allowed to include the performance-based procurement system (PBPS) as an authorized procurement method for the selection of construction contractors and for the selection of architects and engineers when included in a design/build procurement process. Furthermore, it is the intent of the Legislature that the Division’s present method of procuring engineers and architects be modified to provide better value to the taxpayers of Utah. To this end, it is the intent of the Legislature that qualifications-based selection (QBS) may be used and strengthened, (The CECU believed the language ought to have used the word “*should*”) such that the best qualified professionals are selected for each project.”

Given the statement above, the CECU was strongly opposed to the use of PBPS in its current form for the procurement of architects and engineers. The CECU instead favored the continued use of QBS for A/E selection. They were confident that the system, used properly, provides the best project design and the best value to the taxpayers of Utah. The CECU did not desire to only portray a negative tone against PBPS. They believed PBPS includes some aspects of QBS. For example, the concept of the management plan as required under PBPS is a concept the CECU fully endorses. Management plans should be required under QBS. Management plans require the A/E to define the risks as best they understand them, and define their plan for minimizing risk. This is not a new idea but one that many public agencies require particularly on major facilities. The benefits of PBPS as represented by DFCM is to obtain a less-adversarial relationship between parties in the construction of state facilities by focusing in part on participant qualifications and experience within reasonable cost constraints. This is an honorable undertaking and a welcome departure from the past low-bid process in regard to contractor selection on a design-bid-build project. It is less innovative and therefore unacceptable in regard to the A/E selection for project designs. The QBS system already employs presentation and evaluation of credentials with subsequent opportunity to arrive at a fair cost of service. The CECU specifically addressed the following issues it has with PBPS.

1. To date, the system has included surveys sent to submitting firm references that are generally onerous, unfocused, and subject to inaccurate response.
2. The responders usually will not have really strong feelings between a rating of 8 or 9. If a rater feels the firm is good, he or she will give a rating between 7 and 10; if the rater does not like the firm it will be between 1 and 3; but if questioned would not be able to say one firm is 8.3 and the other is 8.6. They are both alike to the responder. The base data is so subjective that the mathematical manipulation of Dr. Kashiwagi’s process cannot make a proper distinction.

3. The rating scale has been abused. If 5 would have been a nominal rating for 'acceptable,' references have been encouraged to use 9 or 10 or not to respond at all. The 10-point spread yields inconsistent responses between references.
4. There is anecdotal and hard evidence that references have been encouraged and manipulated by some submitters to respond with favorable scores.
5. Some information offered in privacy seems to have found its way out of the "confidential" file. This represents a compromise in the integrity of the program. It has resulted in lobbying by some for a better score.
6. The process of A/E selection is overly complicated, time consuming and by extension, expensive to participate in.
7. The process is not applicable to every project or every project delivery method. Large design/build projects seem to be more amenable to the process.
8. The owner, the contractor, and the architect must rate the engineering firm they worked with. If the contractor had some problems with the quality of his work and the engineer, representing the owner, made the contractor fix the problem against his will, the contractor is going to be biased against the engineer in the rating.
9. There is a "nuisance factor" in filling out the questionnaire. In some cases, CECU has heard concerns that filling out the forms could pose some liability to the client.

The CECU recommended that a moratorium should be placed on the use of PBPS for the selection of architects and engineers and let all parties concerned work with DFCM to agree on the process to be used. CECU acknowledged potential benefit from PBPS in the selection of a contractor, but thought that it needs major revision if it is to be used for the selection of professional consultants.

CECU also proposed another aspect for consideration: CECU stressed that this is not a reflection upon the capability or the integrity of the DFCM staff, but that they are so short on manpower that they have considerable difficulty in managing the different projects under their charge. The Legislature has cut more money from their staff budget in the last legislative session. CECU recognized the serious challenge and the pressure to minimize the size and functions of the DFCM staff. External to DFCM there is staff overload, concern for stability, and the like. CECU supported approaches that will improve administration but not at the expense of function.

CECU understood that the reason for the desire to implement PBPS is to correct the serious problem of project change orders resulting in major overruns. CECU believed that the finger of blame for this problem is pointed at the architect/engineer and contractors doing work for the State and by implementing PBPS the problem can be solved. CECU suggested the problem is much broader, and implementing PBPS will not solve the problems. CECU submitted that a major aspect of the problem lies with the complexity of the relationship between state agencies and universities. Some of these entities have their respective staffs with considerable expertise and often find themselves in conflict with DFCM on many key design or construction issues. A careful analysis of the cost overruns resulting from change orders during design and construction would yield that the primary reason for the change orders and resulting cost increases are because of change in project scope. This is not to say that there is not a problem with the engineers or architects involved with state projects. CECU accepted constructive criticism

with the A/E community and does not purport to be perfect, individually or collectively. A/E firms are generally capable and competent and should ask for helpful feedback. DFCM should have the right to objectively differentiate quality of service. A/E firms should and do offer to help and participate in the expression, evaluation and resolution of any problems that they may have with DFCM.

CECU has recommended to Rep. Adair and Mr. Byfield that they are willing to work with all concerned parties, including the Legislature, the Building Board, DFCM, AIA, and the AGC on an ongoing, watchdog committee to define the process and to help implement the procedures. CECU wished to partner with these entities to take ownership of the problem and set in place a long-term solution.

The chair asked for questions from the Building Board.

The chair mentioned if CECU's information pertaining to the nature of change orders coming from scope change rather than errors and omissions is factual or based on feeling.

CECU mentioned it has tried to obtain data to present. CECU presented it as a strongly believed truth. CECU would love to assist in searching through the information, as they feel that is the only way to truly find the problems. CECU acknowledged it may be part of the problem; if so, they want to help to correct it.

Mr. Stepan mentioned that a major portion of concern is focused on the questionnaire, and asked for any suggestions in terms of helping with confidentiality and the credibility of the survey report.

Mr. Summers mentioned that in the QBS process, the architect and engineer is required to submit references. They will submit references they feel will give them a good rating. They must submit enough references on enough projects that are similar in scope to the one in question, that the feedback from the references should be secure. CECU did not believe that the questionnaire is appropriate and many clients are complaining of the time and inconvenience of answering the survey.

Mrs. Ward asked if CECU has an alternative idea to the survey.

Mr. Summers mentioned that requiring that the architect and engineer submit references and allowing the agency to question the references is sufficient. That is the way QBS has worked.

Mr. Jenkins mentioned that the PBPS philosophy employs a team concept, where everyone works together to complete the project on time and within budget, and have a quality, economical process. Mr. Jenkins proposed that CECU does not want to be a part of the team and that CECU should be separate. He asked Mr. Summers to address this concern.

Mr. Summers denied the concern. CECU expressed a desire to be part of the team.

Mr. Jenkins asked if requiring the contractors to operate under PBPS, while allowing the architects and engineers to operate under QBS would be bifurcating the system and abating the team concept?

Mr. Summers asked if DFCM makes separate selections for the contractor and the architect/engineer?

Mr. Jenkins acknowledged that, under PBPS, it all would be brought together and all parties in the project would be united from the very beginning. All parties should be subject to the same selection process if they are brought into the project simultaneously.

Mr. Summers refused that allowing an engineer or architect to be selected by QBS takes them away from the team concept. QBS ensures the best-qualified firm.

The Chair asked if CECU would endorse a rating system other than numerical.

Mr. Summers mentioned that CECU would discuss the possibility.

The Chair asked for the testimony of Barry Smith, President of the Utah Chapter of the American Institute of Architects.

REMARKS BY BARRY SMITH

On behalf of the 400 members in the State of Utah, Mr. Smith noted that how architects are selected at the state level is very important to them. They appreciate the opportunity to testify. He noted that architects are team players. The AIA believed that the State of Utah should select the architect best qualified for each project. Because each project is unique, there is no one firm that will always win. Architects seek a selection process that is fair, easy to understand, and selects the architect best qualified for that project. As a profession, the AIA hoped that PBPS would live up to it's billing. They did not initially complain about the process and gave it a fair chance. As more projects were awarded under PBPS, the AIA had heard increasing complaints from the firms that have participated in the process. The AIA conducted a survey of the firms at the first of the year, which the Building Board has received. The overwhelming majority – 80% - believed that PBPS is not performing as well as the previous system, QBS.

The AIA's intent was to provide constructive criticism. The AIA had shared its concerns with Rep. Adair and DFCM. These concerns have been listened to. A number of meetings have been held with DFCM, CECU, and the AIA, to re-examine the selection process for architects and engineers. This group has reached a consensus as to the goals of the selection and is continuing to meet to refine the process. The AIA sought to work with the system and to arrive at a consensus as to a refinement of the PBPS system that will produce a better process for everyone involved. The AIA listed five concerns:

- 10 As a profession, architects see PBPS as a system thrust upon them. It was not originally designed to select professional services and it is believed this is the first time PBPS is used to select architects and engineers. PBPS has more merit than the low-bid process in the selection of contractors, but the selection of contractors is a dramatically different process than the selection of professional services.
- 20 PBPS requires more time for the participants. The mandatory meetings, the number of people required to attend, the forms the fill out, and other have increased the cost of attempting to obtain state work. A recent example is the Edith Bowen Project at Utah State University. Ten firms went through the entire process that ended in an interview. Several other firms dropped out partway through the process. The successful firm will probably have a fee in the range of \$650,000 for the project. After speaking to several of the firms involved, the AIA believes that the cost to the professionals is conservatively in the neighborhood of \$200,000. Given the profession's tight profit margin, this level of participation is onerous and cannot be continued.
- 30 The survey process has significant and inherent problems. The questions are ill conceived, some do not apply, some are redundant, and some are confusing. The survey is too long; people are tiring of them and

refusing to fill them out. Arizona State University has made mathematical scoring errors. There are a number of firms who have had their scores upgraded once and some have had their scores upgraded twice. Confidential information has been divulged. Now the system is being manipulated to yield high scores. PBPS encourages unethical behavior in a profession that, traditionally, has been very ethical.

40 There is a problem of forced marriages. Because of the scoring process and the bar coding, if an architect does not select the engineers with the best score for that project, the architect will not get the project. The engineers with the best scores are not necessarily better than the person with the next best score, but the process expands that number to the point that it can make the decision of which team gets the project. As a profession, architects can end up being forced to use consultants that they may not have worked with before or one where poor results emerged from a prior relationship.

50 There probably is a significant cost to the State to administer this program in terms of services provided from Arizona State University.

The AIA has been committed to working on developing a selection system with DFCM that is more successful than PBPS and QBS. However, the AIA requested that a moratorium be placed on PBPS for architect and engineer selection to allow time for a revised selection process to be developed, and to evaluate the outcome of existing PBPS selections.

The chair thanked Mr. Smith for his candor.

Ms. Waxman asked if the Building Board proceeds with the AIA's recommendation on the moratorium, what should they do in the meantime?

Mr. Smith proposed returning to QBS for the meantime. There are elements of QBS that are not unlike elements of PBPS. A firm was required to list their past performance in terms of schedule compliance, meeting the budget, and reasonable change order levels, which are some of the major concerns that PBPS is trying to address.

The chair mentioned that he is not sure that those standards of performance are measurable.

Ms. Waxman mentioned the AIA's statement that they have given PBPS a fair chance, but that they have come to the conclusion that it is not working. How much time did it take to come to this conclusion?

Mr. Smith mentioned that the first meetings on PBPS go back nearly a year. Mr. Byfield added that the process for professional services has been within the past several months.

Mr. Hunter mentioned that the AIA felt that PBPS may be sufficient for the contractors but not for procuring professional services.

Mr. Smith noted that architects and engineers have been traditionally selected by QBS, whereas contractors have been selected by low-bid. Certain unethical individuals have used the low bid process and made up for lost profit margins by employing change orders. Mr. Smith contended that QBS ensured that the best qualified firms were being selected to begin with.

Mr. Stepan offered two questions: concerning ethics and abuses seen in the QBS process relative to the new system and a concern over the \$200,000 cost of preparation.

Mr. Smith has seen no ethical abuses in QBS. He has heard stories of block voting in the selection process. DFCM has employed several scoring scenarios to try to keep that from happening. The biggest concern with PBPS is, once it was understood, engineers have coerced and manipulated respondents for high marks.

Mr. Stepan noted that free lunch, Jazz tickets, and golf games have been played out at times. He acknowledged that the AIA has tried to monitor the profession. Mr. Stepan mentioned for the Building Board that what occurs formally in the rating system may take place in an informal way in the QBS process.

Mr. Smith claimed no personal experience with that informal process. On the question of cost, PBPS is more cumbersome than QBS. There is no cutoff. All participants go all the way through. In the previous system, any firm that wanted could submit, but then they were short-listed. If they clearly were not qualified for the job they were out of the selection list instead of having to follow the process all the way through.

The chair mentioned that a third of the earned fee went to the submission for the PBPS selection of the Edith Bowen School.

Mr. Smith reiterated his belief that the cost to the profession for the submission was \$200,000.

Mr. Stepan verified if the cost was about \$20,000 *per firm*. Mr. Smith states that the number is accurate.

Mr. Canfield asked if the paring up of firms in the PBPS system could be a benefit?

Mr. Smith agreed with the statement that teams of firms help to ensure accuracy. Some firms currently are predatory in their low bid pricing, knowing that they have bid lower than the cost of the project, but knowing that it can be made up in change orders. The AIA has not believed that the low bid system is appropriate for contractor selection.

Mr. Jenkins made mention of the AIA's concern over forced marriages. Mr. Jenkins stated that in the last two weeks, as a member of the Building Board, he had been involved in two projects that have had significant overruns and these are not low bid projects. One is almost \$3 million and the other is approaching \$1 million. Mr. Jenkins noticed a lot of finger pointing. The taxpayers of the State of Utah are paying more for lack of the team concept. Mr. Jenkins asked Mr. Smith to explain how a team concept could work and function under PBPS or did he think it absolutely could not work.

Mr. Smith mentioned that the only way to completely avoid Mr. Jenkins' concern is to go through a design/build process (and there are some disadvantages to that). But if the owner works with a single agency that is guaranteed a maximum price, then the conflicts will be worked out within the other group and the owner will not witness it.

Mr. Jenkins added that the design/build process is being taken a step further in building a team effort in building a project that is on time and within budget. Is that something that cannot come from PBPS?

Mr. Smith did not see PBPS generating any team effort. It is simply a different selection process and will not change the dynamics of how a group works.

The chair invited Anthony B. Madsen of the Sheet Metal Contractors Association (SMCA) to make his remarks.

In Mr. Madsen's stead, Mr. Jim Paul spoke on behalf of the SMCA.

REMARKS BY JIM PAUL

The SMCA's statement echoed that of the statement made earlier by Alan J. Peterson of the AGC.

The SMCA supported the theory underlying PBPS or other procurement methods that eliminate low-bid procurement. The SMCA found the following problems:

- 10 DFCM has not always been clear or consistent in requiring or not requiring contractors which are considering bidding for a particular project to be at pre-project meetings. The SCMA believes that a project was recently awarded to a contractor who did not attend a pre-project meeting where the competitors had to.
- 20 Key contractors essential to a project's success such as temperature-controls contractors do not have separate performance lines. There are 5 or 6 contractors under division 1500. There are two for whom performance lines have been developed: sheet metal and mechanical. If the mechanical team is to be considered, there are major contractors left out of the process.
- 30 Performance ratings as utilized have been subjective as contractors have lobbied evaluators for favorable performance ratings, thus skewing the rating system.
- 40 The paperwork burden placed on contractors as they try to comply with the requirements is unworkable, confusing, and costly, discouraging some contractors who otherwise would do State projects. This is particularly true of some smaller firms that may have management teams of three.

The State should consider other methods of procurement, perhaps combining a pre-qualification system with average bid. The cases involving bids for Division 1500 contractors could be pre-qualified by mechanical engineers as well as past performance on state work. An average bid system would eliminate both low and high bids and then take the average of remaining bids to determine the contract price for a particular project. It might be of interest to the Building Board that most of the projects reported earlier having been done under PBPS have also gone through the bid process in the State of Utah. It was the SMCA's belief that performance lines are being considered after price. The SCMA offered the following suggestions:

- 10 Contractors and engineers and partners in the process all participate. The system should be simpler. Perhaps reduce the ratings to three: exceptional, does perform, and does not perform. An explanation would be in order for firms with exceptional performance or non-performance. This may eliminate some of the firms that are frustrated in filling out long forms or those concerned with liability associated with filling them out.
- 20 Any process should consider the financial strength of every subcontractor involved in the project. That often becomes the weak link.
- 30 DFCM should follow the rules that they print. The Building Board would be wise to look to the private sector for other effective procurement methods.

The chair asked for questions from the Building Board.

Mr. Jenkins asked if the reason that DFCM is not clear in what they want is part of the process. One of the things that the Building Board is looking to do is to codify the process so that everyone understands what the process is.

Mr. Madsen replied that DFCM has not followed procedure occasionally. It is not a regular occurrence.

Mr. Jenkins mentioned SMCA's relationship with general contractors with respect to fiscal strength of subcontractors and general contractors.

Mr. Madsen mentioned that he was specifically speaking of the subcontractors. The quality assurance needed for new firms or for the contractor in financial trouble is much greater than the contractor who has financial strength.

Mr. Jenkins asked if this is a problem with PBPS.

Mr. Stepan mentioned that the Building Board is trying to ensure that equity of opportunity is still maintained. One of the things that SCMA provides is a depository for bids to come in, which is a good way to establish equity of opportunity. Is PBPS a challenge to the system?

Mr. Madsen believed it is to be a challenge to the system. Most projects are run through the depository. Contractors complain about not being pre-qualified, like BYU is, but if they do the work necessary to gain pre-qualification, then they are.

The chair called for Mr. Jim Greenwell of the Utah Roofing Contractors Association (URCA) to make his statement.

REMARKS BY JIM GREENWELL

Mr. Greenwell stated that the URCA generally supports the concepts of PBPS. The URCA realized the benefit of better quality contractors and architects. The URCA questioned the validity of the use of PBPS in roofing. Roofing generally is part of a development in terms of new construction. Roofing contractors generally support scope work and specification rather than the use of ideas from individual contractors. The major issue is questioning or understanding the use of PBPS.

Mr. Jenkins sought clarification: PBPS is a pretty good process but should not apply to roofing contractors.

Mr. Greenwell confirmed and stated that PBPS should apply to roofing contractors in terms of new construction, design/build, participating in that process. Where roofers get involved in the re-roofing process of construction, they are generally more secure in understanding that all participants are on an equal footing. URCA believed that putting the process together is encumbering, compared to design/build, for re-roofing projects.

Mr. Jenkins asked what the difference is between roofing contractors and mechanical contractors.

Mr. Greenwell mentioned, in the design/build process there is no difference.

Mr. Jenkins clarified: in PBPS, what is the difference?

Mr. Greenwell replied that in PBPS, if a roofer is the prime contractor in the project, a concern is that everyone has a different idea of what good roofing is, the systems that are available today are widespread, contractors vary in terms of their support for different systems. The root of the concern is not necessarily understanding which firm was successful in getting the job, but how do you tell the number two or three firms why they lost the bid. URCA

understood that PBPS is not clear why losing firms were not selected. In order to make PBPS successful, continued support and participation from contractors is needed.

The chair mentioned that most of the roofing contracts awarded by the state are on existing buildings, rather than new ones. Would the URCA's comments apply to existing buildings as well as new construction?

Mr. Greenwell replied that the perception with existing buildings is that PBPS is beneficial. The concern on recover projects is exactly what is involved in re-roof.

The chair mentioned that the State of Hawaii started a PBPS selection process with the roofers. Because of its success, they are applying it statewide on all buildings. Much of the effort here is a matter of communication. The chair mentioned that the communicative process should be improved.

The chair invited Robert G. Bergman from the Utah Mechanical Contractors Association (UMCA) to present his remarks.

REMARKS BY ROBERT BERGMAN

The UMCA believed the concept of PBPS has a lot of merit. Certain issues pertaining to the rating system need to be addressed, especially those related to the questionnaire. Wording of questions related to plumbing, heating and HVAC have been discussed with Mr. Byfield and the UMCA is confident that their concerns will be dealt with. The UMCA believes that PBPS offers potential for everyone involved. The Architect and Engineer community, Mr. Bergman noted from his personal observation, want a guaranteed contract and guaranteed price without accepting any responsibility or liability and it is exactly what contractors deal with daily. The UMCA recommended that a task force be set up with all parties, including major representatives of the subcontractors. The issues with the rating system can be worked out, as well as other concerns.

The UMCA stressed that, while Mr. Byfield has received a great deal of criticism, DFCM should be commended for thinking outside the box and for looking for alternative ways to procure construction. The UMCA appreciated the bold leadership that has been displayed.

The chair asked for questions.

The chair mentioned that he felt that every testifier has supported PBPS with qualifications.

Mr. Stepan referred to the comment made by Mr. Smith regarding the marriage between A/E services and contractor services. From a contractor's point of view, were there concerns about working with someone with whom a past experience has not been good?

Mr. Bergman mentioned that it is a fair concern. While the A/E community on the whole is very strong, there are some problems with specifications. Obtaining a change order or addressing legitimate concerns are often viewed that contractors are trying to beat the process to pick up money. The answer to the question is that giving equal footing to every participant as a team will work.

Mr. Canfield added that the essence of that is value engineering, which has been promoted by the industry from both sides for many years. Forming the team early seems to address that.

Mr. Bergman agreed with the sentiment. Mechanical contractors frequently participate in value engineering. Under the low bid process, unfortunately, mechanical engineers utilize value engineering and another firm gets the project. PBPS gives mechanical engineers the opportunity to do both.

Ms. Waxman added, based on UMCA's positive comments and their belief that the process could work, do they feel like the mechanical contractors fall into a significantly different category than the roofers.

Mr. Bergman believed that PBPS would work for the entire industry, but everyone would have to be involved and share equal responsibility and risk.

Mr. Jenkins commented that the Building Board is concerned about managing the construction of State buildings in the near future. Low bid does not work. Everyone involved in the process would agree. The reason this hearing is held is to come up with a system that will work. Mr. Bergman perceived a system that does work. Is the State Building Board going in the right direction in holding public hearings to devise a system that the public can work on?

Mr. Bergman thought that the Building Board has been going in the right direction. The present system needs refinement, but PBPS can work.

The chair acknowledged a comment from a licensed architect in the audience. It came to his attention from a consulting engineer that mechanical contractors are rigging the scoring system by calling those whom they sent scoring sheets to and insisting on a score greater than a 9.8. Is the UMCA happy with PBPS because it is working in their favor? He met a mechanical contractor on the job site recently. They were trying to take care of warranty items that were long overdue. The contractor asked him if he was coming to the hearing. The architect said that he would, and asked the contractor how he liked the PBPS system. The contractor replied that he loved it. The architect mentioned the rumor that mechanical contractors are coercing respondents to reply with unrepresentative scores. The architect stated that the mechanical engineer confirmed this in the discussion. The mechanical engineer mentioned that he did not send the architect a score sheet because he new the architect would respond honestly. The architect implored the Building Board to take note of the allegation.

Mr. Bergman wished to discuss with the architect specifics of the allegation. To classify the entire mechanical contracting industry is a misnomer. All systems have the potential of abuse. He had not spoken to any of the UMCA members who have informed him of manipulation. He did not appreciate the suggestion that it had happened. Mr. Bergman offered to work with the architect on that particular issue.

The chair agreed this is a good course of action.

Mr. Jenkins called the architect back up. He mentioned that most people do not like to be rated. In the real world, ratings happen. Is there a way to do an adequate rating and survey system without the aforementioned abuses?

The architect thought there is a way. The questionnaires sent out have been too generic and have asked questions inappropriate for the specific job. A procurement system generated for roofing or painting is now being applied to general contracting, to procurement of professional services. The questionnaires need some refinement. They are onerous. When the architect called Arizona State University for clarification on a question, the student who answered the phone couldn't answer his questions. The architect decried the system as inaccurate. The system could be refined if professionals familiar with the terminology of the questions handled support. Quality assessment in addition to the low bid is a process that works in other countries. In the United Kingdom,

government entities will typically pre-select whom they want to bid. Four or five contractors who may have gone through pre-qualification bid against each other. A system like that renders the best of both worlds. The architect has a misgiving about QBS. While the most qualified individual may be hired, he may not perform. PBPS should be the bottom line. The Building Board has been going in the right direction but the implementation has yielded allegations of impropriety that need to be addressed so that both the contracting community and the design profession sees it as a fair system. The architect stressed that a fair system could be adapted.

The chair called forth Rep. Gerry Adair to make some comments on the proceedings of the hearing.

REMARKS BY REP. GERRY ADAIR

Rep. Adair began by mentioning that everyone likes progress and no one likes change. He claimed to be exactly the same way. Rep. Adair mentioned that, in his career, he got assigned to the Capital Appropriations Committee. He ended up being chairman. If PBPS is not adopted, he asked what other options are available? If not now, when? The State of Utah cannot wait. Rep. Adair mentioned that there is between \$400 million and \$500 million worth of alterations and repairs on State buildings that need to be taken immediately. These facilities needs have not been met. There is \$900 million to \$1 billion worth of new buildings that need to be built. This was the bottom line. He implored the suppliers for their help in working out a practical solution. The current system does not work. He discussed the road situation currently in Utah and that the I-15 project is the biggest road project in the western United States. There is a problem with education. If the problem is not faced with some type of solution, there will be a meltdown in this area.

Currently, Utah is one of four states in the United States that has an AAA bond rating, which is the best rating available. Some of the money that is used is borrowed, like for the I-15 project. The low-bid project is not working. He implored the audience to take a second look at PBPS.

Rep. Adair offered an analogy: he is a real estate broker. He mentioned a problem in the industry. Perhaps one third of the sales in the State of Utah are fraudulent. Accepting that as a premise, the Legislature started 15 months ago to change the process to where they had a mortgage lender's bill. At one point during the session, Rep. Adair had the banks, the credit unions, the mortgage lenders, the depository institutions, mortgage brokers, and even his own realtors' association taking shots at him. He felt similarly pressured with PBPS. He believed that PBPS is right. The Capital Appropriations Committee is charged to formulate a portion of the total budget for facilities needs. Similar to the PBPS experience, many agencies wanted to exempt themselves out of the restrictions in the mortgage lender's bill. The buildings need to be built. The State of Utah is in a crisis mode. Rep. Adair felt strongly enough about PBPS to suffer vilification. Over the last five years, DFCM has had changes not requested by any government agency or DFCM of \$14,853,820. That is a 6% increase over budget. Rep. Adair claimed that he does not have enough money to build or maintain current buildings. The system is broke. Rep. Adair asked for help in bringing the system together, in spite of the fact that some may not like it.

The mortgage lenders did not like their bill, either. Rep. Adair offered another analogy so that the audience can understand the problem as he sees it: if someone fraudulently creates a loan whereby they increase the value of the house to make the loan by \$50,000 to \$100,000, this will artificially increase nearby valuations and therefore property tax rates. Some mortgages will be foreclosed on in the next economic downturn. Rep. Adair plead to the representatives to return to their associations to take a second look at PBPS. Rep. Adair has leadership in the House, and possibly the Senate, that agrees with him. A majority of the people in the committee are in agreement.

Rep. Adair stated that the system needs to be changed and firms need to stop seeking to exempt themselves. If there is resistance to PBPS, avoid telling the Building Board not to employ it, offer ways to make it better.

The chair added that State of Utah has over 30 million square feet of buildings that they own, operate, and maintain. The State leases another 3.5-4 million square feet of buildings from the private sector. Approximately 12% of that 30 million square feet is over 50 years old and has not had significant recycling and renovation. About 25% is over 25 years old. All needs substantial renovation. There is a significant backlog of work and a credit rating that enables the State to finance the improvements. But it has been a challenge convincing other State lawmakers of the Building Board's integrity. Credibility is a significant part of the process.

The chair adjourned the public hearing for an hour at 12:30 p.m.

The chair, after the break, discussed the future building needs of the State of Utah.

The order of individual presenters was as followed:

<u>NAME</u>	<u>TITLE</u>	<u>AGENCY</u>
Mike Hogan	President	Hogan and Associates Construction, Inc.
Lanny Krebs	Estimator	C&A Construction, Inc.
Lonnie Ballard	President	Jacobsen Construction
Andrew J. Seppi	Vice President	Utah Tile and Roofing, Inc.
Neil Spencer	President	Bennion and Associates
Kraig S. Clawson	President	Innovative Roofing Consultants, Inc.
Jim Pehkonen	General Manager	Yamas Controls
Jackie McGill	Business Development	Spectrum Professional Services
John Dennis	Facilities Manager	Ogden-Weber Applied Technology Center
Tony Wegener	Chairman of the Board	Architectural Design West, Inc.
Howard Van Boerum	President	Van Boerum and Frank Associates
Ron Snowden	Construction Manager	Spectrum Construction
Eric Tholen	Principal	EFT Architects, Inc.
Dan Pratt	Vice President	Herm Hughes and Sons
Ron Reaveley		Reeveley Engineering

The chair called Mike Hogan to testify.

REMARKS BY MIKE HOGAN

Mike Hogan spoke earlier to the Capital Appropriations Committee and this statement was essentially the same. Mr. Hogan spoke on behalf of Hogan and Associates Construction, a firm employing 150 employees based in Centerville, Utah. Mr. Hogan spoke in support of PBPS.

Hogan and Associates is a 50-year company. Recently, Hogan had not done much work for DFCM because DFCM has worked with the low-bid process. Hogan found it difficult to do the level of quality work they felt important and still be able to compete in the low-bid process. Since PBPS, Hogan decided to jump in wholeheartedly. Hogan has been awarded three projects since. The question, from a contractor's point of view and the State's point of view, is what difference does PBPS make? There is a different spirit that is engendered through the process. It is a spirit of cooperation. One of working with equals, including architects, engineers, suppliers, and consumers.

Mr. Hogan offered an experience to demonstrate the effectiveness of PBPS. Hogan is currently building the new PE building for Southern Utah University. Hogan had a problem with the delivery of major air handlers from the Trane Corporation. In times past, DFCM would perceive the problem as that of the general contractor. With the spirit of cooperation, all parties worked together and DFCM was able to secure a much-earlier delivery for the air handlers, which were delivered on site several weeks ahead of schedule. Without PBPS, Hogan may have lacked the ability to get the air handlers by themselves. The system worked to the benefit of both parties.

There are some problems with PBPS from a contractor's point of view. Among them is the number of surveys that needs to be sent out and returned. This is an imposition on clients. At times they are asked many times to fill out new surveys and send them in based on new projects. Hogan would recommend a way to streamline the survey process. All the contractors and subcontractors interested in the process have sent the surveys out. The State and contractors may be in a position now to take advantage of the situation. Hogan believed the information gained should be used so that the benefits of quality work can be reaped.

Mr. Hogan offered the following comparison: hiring a contractor is like hiring an employee. Is the price that the employee will work for the only criterion used when an employee is selected? Experience, education, and other factors, as well as price, determine the selection. PBPS should be viewed in the same scenario.

Mr. Jenkins mentioned to Mr. Hogan that the A/E group would like to be exempted from the process for numerous reasons. It seems to him that PBPS should be a teamwork system. Mr. Jenkins sought Mr. Hogan's opinion on whether the A/E group should be subject to PBPS.

Mr. Hogan stated he was not sure he is the right person to answer that. He declined to make a comment.

Mr. Hogan stated that PBPS takes the adversarial nature out of the construction process and noted how it transformed his company.

Mr. Hunter noted that Hogan Construction had the cooperation of all the subcontractors when it sought the bid for the SUU PE Building. It was a testament to the cooperation that can exist in a large project.

Mr. Hogan mentioned that they put a great deal more work in the selection of subcontractors than what they would normally do. They were much better prepared to make the presentation, something that PBPS has engendered.

Mr. Canfield asked how the teamwork functions.

Mr. Hogan replied that, in the case of the SUU PE Building, the drawings were made. The architects and engineers had completed their job. They were to take the design and build it. There is a project out, the Department of Corrections, which lends itself to the scenario Mr. Canfield mentioned.

Mr. Canfield asked how the process of selecting architect and engineer firms would work?

Hogan would like to work with people with whom good working relationships have been maintained. To Hogan, ratings on the form are important. Hogan utilizes the data just as DFCM does.

Chair asked for Lanny Krebs to make his statement. As Mr. Krebs was not present, Lonnie Ballard of Jacobsen Construction is called forward.

REMARKS BY LONNIE BALLARD

Lonnie Ballard, speaking on behalf of Jacobsen Construction, affirmed the position made by Alan. J. Petersen for AGC. In the context of things, he would fall most closely to the position that would applaud the efforts of DFCM to move to PBPS. Jacobsen Construction has been an advocate of including performance in the selection process. They have advocated including a contractor on the project development and design phase. 90% of Jacobsen Construction's work is team building. Anything that moves the State away from the concept would be a mistake. Jacobsen Construction has been involved in the PBPS selection process and has some concern with the data collection process.

Is the data tainted as it comes in? Yes. Is there a lack of confidence in the market in general as to the collection of data on contractors? Yes. This may be a good reason to thoroughly examine the system to ensure that confidence be maintained. The national AGC has supported alternative delivery systems for use in the selection process. The distinction needs to be made that abandoning QBS does not mean that DFCM abandons performance-based selection systems.

Mr. Ballard agreed with Mr. Hogan that private industry is demanding better ways of delivering the product. Most private owners engage in performance-based selection. That concept in terms of its use by public entities, Utah is progressive versus other states. Jacobsen applauded that Utah is far ahead of some other areas in the use of alternate delivery systems.

Mr. Ballard would love to see the system opened up for scrutiny. They would love to see contractors participate and to have the State use that system in the future.

Ms. Ward mentioned that a lot of the discussion has focused on up-front costs. What is the feeling of Jacobsen Construction about the costs associated with developing the team and the management plan?

Mr. Ballard mentioned that any time a team is built into the selection process, cost is involved. Mr. Ballard advocated a two-stage selection process where a short list is used so that, especially in the design/build format, the costs are not excessive, especially for those design professionals who participated in the design/build format. Mr. Ballard was not sure if the costs are excessive in QBS process. However, if a lot of effort is being undertaken to format survey results so that every survey result comes back as a 10, and if a lot of time and effort is being placed in personal meetings and greetings, then it is excessive and unnecessary. It is not a part of other selection systems.

Mr. Jenkins asked what Mr. Ballard means by the data collection process.

Mr. Ballard mentioned that he has a problem with trying to push subjectivity out of the process. What is actually done is the subjective nature of the referrals is being pushed down to a lower level where it is out of view for the selection team. Nevertheless it is very much a part of the referral process. Mr. Ballard had a problem with the absence of adverse consequences if a line is turned in without personal contact. Judgement in the process is critical and cannot be pushed out of the selection process through the use of supposedly empirical surveys and mathematical formulas. It can be fixed, but it does warrant attention and is what is causing the loss of confidence in the system.

Mr. Jenkins said that at the end of the project, every member on the team rates every other member, including DFCM. Would this be a good alternative to the traditional selection process?

Mr. Ballard thought that evaluating performance on projects is critical. The team ought to evaluate each other. It ought to happen in an atmosphere of confidence and in a way that no one feels that incorrect scores are being required of him or her. The integrity of the process is absolutely critical. It should be done.

The chair thanked Mr. Ballard.

The chair called forward Andrew J. Seppi of Utah Tile and Roofing (UTR).

REMARKS BY ANDREW J. SEPPi

Mr. Seppi reported that the opinion of UTR is quite biased. UTR came from the perspective of being a successful contractor under PBPS. UTR felt that PBPS allowed contractors to shine based on past performance, financial strength, management skills, quality, and innovation. UTR felt PBPS encouraged innovation and competition among performing participants and requires contractors to make an up-front commitment of time and resources necessary to produce a successful management plan. Through this commitment, the contractors obtained an in-depth knowledge of the project that evolves into fewer errors, conflicts, problems, a higher level of performance, and increased overall project quality. It shifts construction liabilities for design from the design team to the contractor through his increased investigation in the project. It encourages partnership between quality-oriented contractors, the owner, and the design community, and it allows participants to work toward the mutual successful completion of the project. PBPS allows the owner to reduce their investment of human and construction resources normally applied to design, scheduling and management because the contractor picks up an additional load in that regard. It creates marginally-higher initial costs, which equate in the long run to higher quality, reduced life-cycle costing, lower maintenance costs, and reduced future capital spending. The overall benefits are ease of construction with fewer contract changes, higher quality design, management, and finished project, superior service and warranty provisions, and reduced operating management and maintenance expense, and lower life-cycle capital costs.

Mr. Jenkins asked Mr. Seppi if he sees problems with PBPS.

Mr. Seppi acknowledged problems. UTR felt like DFCM has not adequately educated the community on how the contract works and how a contractor can obtain work. The contractor community has been afraid of the process and has not taken the opportunity to learn how to obtain work. The process of ranking the participants is onerous and difficult and in need of revision. There are a lot of minor problems but the process in whole is very good.

Mr. Stepan asked Mr. Seppi if he heard him say if there was some shifting of responsibility from the design team to the contractor and asks him to elaborate.

Mr. Seppi agreed. From a subcontractor's point of view, when UTR gets involved in a job, it seems as though the want is for a new roof and the real problems may not be addressed, like mechanical problems, drainage or seismic considerations. When UTR gets involved they felt they have the opportunity to solve the problem. More ownership in the project is taken when more responsibility is given.

The chair thanked Mr. Seppi for his comments.

The chair called Mr. Neil Spencer, President of Bennion and Associates Engineering, to testify.

REMARKS BY NEIL SPENCER

Mr. Spencer noted, referring to a letter written by Bennion and Associates to DFCM, that a mechanical engineering firm was allowed to change their scores in a selection process. Bennion and Associates did not feel that was fair. Mr. Spencer argued that, if scores will continue to be flexible, all firms will ultimately have a 10. The system at that point becomes meaningless.

The chair asked if the concern was adequately addressed by DFCM.

Mr. Spencer noted that meetings were held. He was not certain the issue has been addressed. One of the issues that is unique to mechanical engineers, is that they begin with average firm scores that are relatively close. By the way scores were indexed, the close scores were exaggerated. The large difference knocked Bennion and Associates out of the competition. Architects and contractors cannot use Bennion's scores.

The chair interrupted, asking Dr. Kashiwagi to address the issue.

Dr. Kashiwagi noted that the numbers came from construction. There is a whole set of factors in place for subcontractors. Each set of factors for each subcontractor were then passed on to the general contractors who had to look at the factors and the price at the same time. The generals had the factors ahead of time but did not get the price until the last minute. At the last minute, the general contractors were looking at the factors and the price. So the general contractors sought something simpler: a selection number, along with the price. Dr. Kashiwagi ran a selection model on the subcontractors. The issue Mr. Spencer raised is a valid point. When you run the selection model on the subs, it is a selection model that tells the general contractor who they should pick based on the numbers. What happens is that the numbers spread out. Because it spreads out, it makes the selections very clear. Dr. Kashiwagi acknowledged that work can be done in that area. The issue is being addressed.

Mr. Jenkins asked Dr. Kashiwagi how the indexing works.

Dr. Kashiwagi mentioned that the process begins with a multi-criterion decision-making process. The different criteria are weighted by DFCM. When it is weighted, it takes the information value based on a relative spread of numbers. It makes a decision like a human mind and comes up with the distance numbers with 0 being the best and the further away from 0, the less feasible the alternative. It works in relative fashion. If a human mind looks at 50 different criteria and knows what is important for the owner for that unique requirement, it would function in the same way.

In the design/build competition, it was weighted a lot less. Even though the second number may have been 0.1 and 0.4, the overall difference because of the lack of weighting on that was negligible. It did not make a difference in the factor.

Mr. Spencer referred to a second letter written to DFCM, on the Edith Bowen School project. The letter pointed out mistakes made in the process. In the addendum, the lead mechanical design firm score was not to be considered. It was supposed to be thrown out, but was included in the selection process. The other agreement was that the lead mechanical designer score was not supposed to be index. In this case, Bennion's score was around 9 and the other firm's was around 9.5, but the difference ended up being 0 for the other firm and our score was 0.182. The lowest score for a successful architectural team was less than 0.182. Bennion's mechanical engineer score which was supposed to be 5% of the total makeup of the scoring system, ended up being more than the total architectural design firm's score. It makes the firm look bad and knocks them out of the competition.

The chair thanked Mr. Spencer for his remarks.

The chair called for Mr. Kraig S. Clawson of Innovative Roofing Consultants, Inc (IRC).

REMARKS OF KRAIG S. CLAWSON

Mr. Klawson claimed to represent a unique perspective to PBPS. Because of the work they do, IRC's position is closely related to the consensus of the architect and engineer community. In the 15 years of business in Salt Lake, four of those were spent managing roofing for DFCM. IRC has seen both sides of the fence relative to the efforts of the State to come up with viable programs to deal with procurement on all levels. IRC supported PBPS. PBPS promoted the team effort and cooperation. It is applicable to the A/E and contracting community. IRC agreed with much of the constructive criticism that has been presented. There is a need for improvement, but the program can work.

However, there are basic principles of similar programs and other programs that can be made to work. It is a matter of the level of commitment the State and the community make to the program and the way it is managed.

Mr. Klawson believed it is important to utilize the knowledge and experience of the community, both in the public and private sector, in developing a good program. A committee should be formed that would allow participation and input on an on-going basis so that there would be a perception of cooperation in the process. One of the criticisms that needs to be dealt with is that PBPS tends to be elitist. One suggestion is that it be set up in a tiered way. Focusing on the roofing community, if a start-up roofing company can qualify to do outhouses at state parks as a start, knowing that as they work up through the program, that someday, if they grow and maintain competency, they can get bigger and bigger jobs. In the roofing community, the perception is that if a firm is on the elite level, there is no room or opportunity. Modifications to the program along these lines should be considered.

DFCM is looked at as a role-model in the community. Mr. Klawson's widespread involvement has taught him that a successful program can be implemented, that it will be adopted throughout the State and in adjoining states.

IRC supported PBPS as a continued effort to improve programs that will benefit everyone.

Mr. Jenkins asked if IRC agrees with Mr. Greenwell's proposition that roofers be excluded from PBPS.

Mr. Klawson interpreted Mr. Greenwell's comment to mean that the process worked for new construction and design/build but he did not feel that it applied to re-roofing. Mr. Klawson disagreed. If properly designs and solutions are worked into PBPS, it could work for re-roofing projects.

Mr. Jenkins asked about the existence of the elitist level. Is it possible for others to get into the elitist level to participate?

Mr. Klawson noted that it is clear to the Building Board that education and communication is a key element in the process. Part of the culpability is with the community, because they have not participated upon invitation. They have not allowed themselves to be educated. There are misconceptions about the program. If people could get education and if communication could occur, then the problems would be diminished.

The chair thanked Mr. Klawson for his comments.

The chair invited Mr. Jim Pekhonen of Yamas Controls to make his remarks.

REMARKS BY JIM PEKHONEN

Mr. Pekhonen stated that they currently have no rating. Yamas Controls has been doing building automation and temperature control systems and has been in Salt Lake for 42 years. Yamas Controls sought to obtain a rating. The performance of the temperature control system at the end of the project has a definite effect on the building. Yamas Controls has done a lot of DFCM work in the past, and is currently working on the SUU PE Building. Yamas Controls is currently supporting the team for the Department of Corrections Administration Building. Yamas Controls supported the concept of PBPS. For non-DFCM work, Yamas Controls does a lot of design/build work, and they like it to be performance-based, so that the mechanical and general contractors are happy with the work.

The process should be refined, not abandoned.

Yamas Controls believed it can be a part of a successful project under PBPS.

The chair thanked Mr. Pekhonen for his comments.

The chair invited Jackie McGill, from Spectrum Professional Services, to testify.

REMARKS BY JACKIE MCGILL

Ms. McGill spoke not as a technical person, but as a representative of business development. Spectrum has met with Dr. Kashiwagi and DFCM over a number of issues, including the validity of the performance line and some issues discussed today.

Spectrum has made some changes based on the theory of PBPS. Spectrum attended a three-day seminar last August and learned about the theory and the process and took that information back to Spectrum staff and have implemented a process of improving performance based on those theories. The firm leadership has made decisions to develop initiatives that respond to those theories. Spectrum does not see the PBPS process as ending once selection has been made for a project. PBPS is an ongoing process of improving firm performance.

The chair thanked Jackie McGill for her comments

The chair invited John Dennis, Facilities Manager for the Ogden-Weber Applied Technology Center, to make his presentation.

REMARKS BY JOHN DENNIS

Mr. Dennis, speaking on behalf of the Ogden-Weber ATC, spoke in favor of PBPS. Two projects have been undertaken at the facility, the first being in 1983. It was for \$2 million and was due for completion in mid-1984. It was not complete until 1985, six months behind schedule. Some of the problems encountered were poor workmanship, problems which the ATC is still suffering from, poor construction planning and scheduling, poor supervision of the project by contractors and subcontractors, poor selection of tradesmen and workmen, the quality of work was very much in question, poor selection of subcontractors, and constant change over in key personnel due to poor supervision by the general contractor. It was a constant battle with the contractor to have an adequate workforce to get the job done. The general contractor went bankrupt, as well as the architect and the

painting subcontractor. The mechanical engineer never received payment on the project and the bonding company had to complete the project for the ATC.

The second project was the metal-trades building addition, started in July 1995 and was due for completion in August 1996 and cost \$4 million. The actual completion was March of 1997. There was a 26-page punch list on the project when it was due for completion and required arbitration for the added costs to the project. There was a changeover of 5 project supervisors. The timelines were never adhered to. Commitments made never came to fruition.

Neither of these projects were performance-based projects. Mr. Dennis was aware of what can be done when firms who lack competence and ability are eliminated from the projects.

The chair thanked Mr. Dennis for his comments.

The chair asked for the comments of Tony Wegener, President of Architectural Design West.

REMARKS BY TONY WEGENER

Tony Wegener stated that Architectural Design West (ADW) is the first architectural firm to have been involved with PBPS. ADW is currently involved with the University of Utah Student Housing Project, Phase II, and the Bridgerland ATC Phase VI. Mr. Wegener stressed that PBPS is just that, a procurement system. What happens after the procurement of a contractor is not in question. DFCM has failed to comprehend and respond to the specific contractual requirements of PBPS during construction. Mr. Wegener offered to describe the problem on the premise that one needs to understand the problem before one attempts to solve it.

The University of Utah Housing Project Phase II was one that ADW did not want to use a low-bid contractor on for reasons that have been explained. ADW and Wayne Bingham recommended the multi-step procedure that is currently in the State procurement code. Mr. Byfield introduced PBPS to ADW in 1998 and ADW initially advocated Dr. Kashiwagi's theory even though PBPS had not been applied to a construction project on the scale of Phase II. The performance requirements for the competing contractors were simple. First, they had to submit a price within the owner's budget of \$53 million; secondly they had to guarantee completion by May 1, 2000; third, they had to accept the fact that the design documents were incomplete at the time they were priced; and all the risk associated with the project had to be accepted. The contractor will not be complete by May 1, 2000. The contract will not be delivered within the contractor's price or the owner's budget. The project was not without protest from other contractors and is not without risk to the State of Utah. The risk to the State is enormous. Therefore ADW concludes that PBPS failed on the project.

PBPS cannot be blamed entirely. It is a procurement process. Having procured the contract, DFCM failed to provide the selected contractor with an appropriate contract that would describe the desired outcome and the contractor's responsibility to assume all risk relative to cost and schedule. Mr. Wegener proceeded to discuss two contract environments; low-bid and PBPS. Everyone understands that DFCM's standard low-bid contract. Those documents are a body of procedure and law. The PBPS environment could have been a maximum-priced design/build environment wherein the contractor assumes all risk, full responsibility and liability for incomplete design documents, and guarantees the cost and schedule. The architect changes from a contract administrative to a facilitator of the contractor. That is the theory. The reality is that the contractor's agreement with DFCM did not describe or create the intended environment contractually. DFCM contracted with the contractor using the standard low-bid contract and directed the contractor to implement the contract that created confusion. There were two different environments and two different performance expectations on the contractor and the architect.

The contractor either by direction or choice (Mr. Wegener was uncertain) is functioning in the traditional low-bid environment. DFCM tried initially to take care of this problem by attaching all of the performance-based requirements in the selection process to the contract by reference. DFCM's attachment apparently has no legal meaning. Six months ago, ADW asked DFCM's legal counsel to interpret the contract and to identify which contractual environment the architect and contractor should function. The legal counsel could not make a recommendation and the confusion continues. Because of DFCM's failure to comprehend the response to specific contract requirements of PBPS during construction, there are many losers in the project: the University of Utah, The State of Utah, and the A/E Team.

The chair thanked Mr. Wegener for his comments and opens the testimony up for questioning.

Mr. Jenkins asked if there is a way to make PBPS work in a situation like Phase II, or is it something the Building Board should move away from?

Mr. Wegener noted that DFCM could write contracts that could make PBPS work.

Mr. Jenkins asked if the problem is DFCM and not PBPS?

Mr. Wegener asserted that the problem is absolutely with DFCM.

The chair asked Mr. Wegener to describe for the Building Board the contract that was issued to ADW for Phase II and it's differences compared to contracts written for single buildings. Mr. Wegener is asked to describe ADW's responsibilities in the Phase II contract.

Mr. Wegener noted that ADW's responsibilities are being revised currently to fulfill a more traditional architect's role. Hanbury Evans of Virginia consulted with ADW on the project.

The chair asked if ADW was selected in the PBPS program.

Mr. Wegener stated that ADW was selected through traditional means.

Mrs. Ward asked if ADW has participated in other PBPS projects.

Mr. Wegener affirmed, stating that ADW is the design architect for Bridgerland ATC, Phase VI, which has just begun. The contracts for both projects awarded to ADW are the same. DFCM has done nothing in a year to address the contractual issues. If Hogan Construction performs on the Bridgerland ATC project, it is because Hogan chooses to perform.

Mr. Jenkins sought clarification, asking Mr. Wegener if DFCM is not following PBPS in the projects ADW is involved in.

Mr. Wegener believed that the contracts are at issue. The contract, however, gives no legal imperative to Hogan to perform. There is no legal risk. Any general contractor who did not want to be a performer could say they would only follow the terms of the contract. This is what is happening at the University of Utah. The contractor is directed to follow the terms of the contract, in a standard low-bid contract. The results are change orders, delays, and claims.

Mr. Jenkins mentioned that both projects should have been PBPS and asks if DFCM obviated PBPS in the writing of the contract?

Mr. Wegener stated that this is true for the Phase II project. On Bridgerland, Phase VI, Mr. Wegener believes that high-performance will be a result of Hogan Construction's efforts and not PBPS.

Mr. Jenkins asked if the Bridgerland Phase VI obviated PBPS.

Mr. Wegener stated that the requirements of PBPS are attached to the contract by reference. Mr. Alan Bachman, counsel for DFCM has informed Mr. Wegener that the references to PBPS does not mean anything.

The chair asked for other questions directed at Mr. Wegener.

Mr. Hunter commented that the change in the procurement system means that there is a domino effect that impacts many other areas, including the contract. The process should be worked throughout the system and not just at the selection level. PBPS should incorporate elements that occur after selection.

Mr. Wegener added that the multi-step procurement process is a part of the State procurement code. In 1998, when it was proposed, there were some discrepancies in the code that would have made it difficult to implement. The multi-step process would allow DFCM contractors both on the basis of their past performance and their price. Two years ago there was a problem in the code. In the past, most recently this legislative session, H.B. 42, cleaned up all of the problems. ADW has been using the multi-step process with school districts up and down the Wasatch Front with success. ADW recommended a multi-step procurement process.

The chair thanked Mr. Wegener for his testimony, and invited Howard Van Boerum of Van Boerum Frank and Associates, to speak.

REMARKS OF HOWARD VAN BOERUM

The chair asked Mr. Van Boerum how many projects his firm has completed for the State.

Mr. Van Boerum responded that his firm has done hundreds. Under PBPS, Van Boerum and Frank has been unsuccessful in one project and successful on another. Van Boerum and Frank has proposed on several.

The chair asked if the successful project is underway.

Mr. Van Boerum replied that the project, Edith Bowen, has just started. Van Boerum and Frank is on the short list for the Department Of Corrections Administration Building.

Mr. Van Boerum introduced himself as the President of Van Boerum Frank and Associates, a mechanical and civil engineering firm. Van Boerum and Frank has a 45-man office in Salt Lake City. Mr. Van Boerum has been a licensee professional engineer for 33 years and has been working for the State for an even longer period of time.

Mr. Van Boerum wished to segregate the discussion between comments made relative to the procurement of architect and engineer service as opposed to the procurement of contracting services. Architect and engineering services traditionally have been procured using QBS. Van Boerum and Frank has done work with the federal, state, local governments and private companies for over 30 years using QBS. Van Boerum and Frank believes

that QBS works. It is self-policing. The question is why it is not working in the State of Utah if it has worked so well in other agencies for decades.

Mr. Van Boerum believed that several things have been confused, including procurement of professional services and procurement of contracting services. DFCM has tried to draw the same conclusions in spite of different procurements. Architects and engineers and contractors have never been selected on the same basis. There are a few instances in the State process where they have selected contractors based on qualifications. But low-bid is the standard. Professional services have always been selected using QBS. Mr. Van Boerum asked why the entire process does not work this way?

This issue needs to go to the Legislature, DFCM, the architects and engineers, the contractors. All parties have a vested interest to make the process work. The legislative budgets are inadequate and DFCM is required to enforce these budgets. The user requests more than the legislative budget will allow and conflict starts from the very beginning, which translates to conflict throughout the project. Adding the low bid on top of it, DFCM has a situation that, in many instances, didn't provide for what the State wanted.

The chair acknowledged that Mr. Van Boerum is the epitome of a professional person who understands the procurement process and seeks his commentary on matters of procurement.

Mr. Van Boerum mentioned that the connotation 'performance based' is that contractors and professional firms ought to be judged on performance. However, the PBPS system is flawed.

The chair asked if Mr. Van Boerum feels the system is flawed on both the A/E side and the contractor side. There is a real problem DFCM has in that it is perceived by knowledgeable people that it costs DFCM about twice as much to deliver a product as it does in the private sector or in other public agencies such as school districts. The chair asked Mr. Van Boerum why this is so.

Mr. Van Boerum cited a level of bureaucracy in the State that does not exist in the private sector.

The chair asked if the bureaucracy the reason the current difficulties exist.

Mr. Van Boerum mentioned that he thinks he is not qualified to answer the question. Mr. Van Boerum proposed that there are several levels of bureaucracies in State projects that are not present in the private sector. In the Public Education sector, bureaucracy is not nearly as involved as it is on the state level.

The chair asked if Mr. Van Boerum if there is an element in PBPS that will help the State resolve initial product cost problems.

Mr. Van Boerum stated that he does not know. He noted Rep. Adair's mention that cost overruns are 6.25%. Private sector clients can reduce initial costs by having less criteria than the State does. Possibly some of the criteria the State uses are unnecessary.

The chair was trying to illustrate the concerns of the Building Board. There needs to be funding to take care of the projects. If there is no adequate cost containment, there will be no funding. The Building Board has been looking at PBPS as one of several systems to help contain costs.

Mr. Van Boerum offered that the aforementioned costs are only a part of cost. They only reflect construction costs, and not those of the overall project. The bureaucracy levels add costs that are not there in the private sector.

Mr. Van Boerum stated that PBPS will not solve all the problems. In the contracting community, it has merit. The black-box theory system that is being adopted by the State should be dropped. Instead, conventional wisdom, good references, and pre-qualifications should be used in contracting. Referring to the black box theory, Mr. Van Boerum stated that most people in the hearing cannot adequately explain the complex theory system that is being used and debated in public meetings. He noted that Messrs. Byfield and Kashiwagi have not agreed at certain points on matters of the theory. Any system that is so complex that it takes weeks to help people understand how it works has to be called into question.

Mr. Jenkins asked if there are a lot of theoretical bases that are being used.

Mr. Van Boerum stated that the subjectivity in PBPS is a problem. He stated that the forms are entirely subjective. Using the subjectivity and inserting it into a complex formula that few understand to come out with finite numbers that are supposed to differentiate between firms is a problem. If the differential is so great when the subjects are being asked to identify how the firms were all rated the people within 2 or 3 percent of each other, it makes little sense.

The chair asked if Mr. Van Boerum has taken adequate time and effort to understand the process.

Mr. Van Boerum affirmed. He reasserts that the information being put into the process is subjective and the results are finite, which are larger than what the initial differences between the firms seemed.

Mr. Jenkins asked if there is a probability that something can be worked out with PBPS.

Mr. Van Boerum thought that QBS is sufficient. It is self-policing and asks for relevant and meaningful projects from those trying to select on a project; it asks for good references; and performance related to quality, cost, and schedule control. Four or five telephone calls can be made to make a QBS assessment, and the results would be better than those generated by the complicated formula.

Mrs. Ward asked Dr. Kashiwagi if there is an enormous difference between QBS and PBPS.

Mr. Kashiwagi stated that there is no large difference between the systems, and offers the following example. An unbiased selection committee assessing two engineering firms that received references back, giving one firm 8.2 and another 8.1. If a computer model was not being used, it would be proposed that the firm with the higher score would be selected. This is a selection model, considering not only past performance, but the management plan and the individuals involved. Mr. Kashiwagi cited that the model is not perfect and requires fine tuning. The only difference between a true QBS system and PBPS that is not being used, is that ratings will be used before and after a project. Ratings after the project will be used in future selection. PBPS is using a fuzzy logic controller. It is a multi-criteria decision-making model that ASU is ready to turn over to the State of Utah to demonstrate that it is very simplistic. The model has been turned over to Hawaii and their people know how to use it.

Mr. Van Boerum stated that if he is taking a scale from 0 to 10, where 0 is poor performance, and 10 is exceptional, and someone gets rated 8.1 or 8.3, he submits that the differential between the two cannot be discriminated. Larger margins can be discriminated against.

Mrs. Ward submitted that as the PBPS process goes on, does it not exclude the low performers?

Mr. Kashiwagi offered that, if there are two firms and only one is going to get the job, how is the decision made if one is 8.2 and the other is 8.1? When a firm does not get a job, does it make that firm a non-performer? Mr. Kashiwagi stated that discrimination is made through variables other than references. These variables are what result in the varied output numbers.

Mr. Van Boerum was in agreement that there ought to be a better system for contractors than low-bid.

The chair called Eric Bowen forth to testify.

REMARKS BY ERIC THOLEN

Mr. Tholen announced himself as a principal of EFT Architects. EFT has followed PBPS from the outset. They paid up front to attend the initial seminars. EFT has been following the process with interest, as EFT has done a lot of State work in the past. EFT also has tried to stand back and take an objective look at the project. EFT has not pursued State work during the time that the PBPS process has been in place. Mr. Tholen has met with Dr. Kashiwagi personally, and the responses he has received have been unsatisfactory. The last meeting he had, the questions he requested could not be answered by Dr. Kashiwagi. Mr. Tholen cites the testimony of two engineers who discussed what took place. Mr. Tholen spent quite a bit of time outside the seminar, studying the process, looking at, for instance, the results of the electrical engineers. Their spread of numbers yielded a 5% variance among the top five. Among the mechanical engineers, there was a similar spread. When these numbers were put into the multi-tasking model, a ten-times disparity was suddenly created in the selection process, where, on one project, a mechanical engineer on the team took the first place slot on the architect team became a fourth-place member on this assessment.

There was a situation where two entries on a pool subcontractor, two top teams were knocked out of the running to where the project was lost. There was \$2 million left on the table because a pool contractor out of Ontario was chosen vs. a local pool subcontractor. EFT has heard complaints from clients who have gone through the process repeatedly, trying to contact ASU for help. The responses from ASU are insufficient. Much of the concerns stated at the public hearing are valid. Team-building, for example. PBPS is just a procurement system. The only time the team-building concept is tied to the process is that firms are penalized for non-performance in the end. Delays, claims, and disputes become 25% of the next rating, so there is no chance of getting other state work. Past performance, repeat clients, desires to do business again, are indicative of the way a business is run. Howard raised three simple assessment questions: what are the past projects? References? Performance can be assessed through a phone call. Cost of construction? Mr. Tholen cited the project where \$2 million was left on the table because of the PBPS system. Perhaps the willingness to work in the system is because the money is there. Mr. Tholen mentioned that, witnessing the system, EFT felt good about the ratings. But the accuracy is not there. EFT's generic performance line has changed three different times and no new criteria have been submitted. The objective numbering system has not provided a reliable decision-making tool. Mr. Tholen believes that performance is a valid concern. Performance-based procurement (not as a system) is something that should be sought for. Mr. Tholen's recommendation was that a task force be assembled so that the group can assess how best DFCM ought to procure services. There have been favorable responses from contractors because the last day of bidding is frenzied and he has heard that the firm with the error got the bid. Contractors are looking for another way to get away with the low-bid system.

Mrs. Ward asked Mr. Tholen about the flawed-questionnaire and how it was compiled and formulated.

Mr. Byfield mentioned that Dr. Kashiwagi had run 15 to 20 smaller projects. He brought their criteria sheets to DFCM as a point of departure. The concept is that a firm ought to put whatever distinguishing criteria that separates that firm from it's competitor on the criteria sheet. The criteria sheet has been formulated by people in the industry.

Mrs. Ward submitted that perhaps the best solution is to formulate a task force to generate questions that are reasonable and that will lend credibility to that aspect of PBPS.

The chair mentioned that the public hearing has yielded good support for PBPS from the contractors but the A/E community has not offered the same support. Perhaps the process should be bifurcated and DFCM should approach the A/E community to assess their fairness criteria. The A/E criteria was devised by the architects, in the understanding of the chair.

Mr. Tholen confirmed that the community devised the A/E criteria. There was misdirection how the process was going to take place. After a meeting, it was finally decided that the architect community could give input to the formulation of criteria. That became the basis for selection.

Mr. Byfield interrupted, stating that every architect present at the April meeting for criteria creation heard him state that the criteria means nothing. The architects wanted nothing to do with formulating the criteria. DFCM did not use the record sheet used by the AIA.

Mr. Kashiwagi added that when the owners called ASU to ask the meaning of the question, perhaps the insufficient answers were a result of ASU not knowing what the question means. ASU was not allowed input in the questions sent to them.

Chair asked if the criteria system has been devised by the A/E community?

Mr. Kashiwagi stated that the intent was for the A/E community were to set the criteria.

There is a general assessment among the Building Board that criteria need to be reworked.

The chair thanked Mr. Tholen for his contribution.

The chair acknowledged that he skipped ahead of Ron Snowden and Dan Pratt. The chair has asked not to have any additional presenters. The chair invited Mr. Snowden of Spectrum Engineering, to the podium. The chair mentioned that he would like no information to be repeated.

REMARKS BY RON SNOWDEN

Mr. Snowden mentioned that he has been involved with PBPS through the year. He has been involved in the selection committees of two projects, Student Housing Phase II and Bridgerland ATC Phase VI. Mr. Snowden has participated in the Richfield Youth Correctional Facility as a contractor. Mr. Snowden believed he has a fair background in the PBPS system.

Mr. Snowden was not opposed to PBPS but did not support it as presently implemented. He spoke not on behalf of Spectrum Engineering but as a friend of DFCM. He felt strongly that DFCM's efforts in the past year have been beneficial to the State. Mr. Snowden agreed with Mr. Wegener in that DFCM did not do what they should

have done. However, that is a small segment of what has happened. PBPS is not working efficiently and it has not from the beginning. But the reasons are larger than the contract not being appropriate.

Mr. Snowden did not support PBPS as it is being administered. As a contractor, he sees the outcome as uncertain. Bidding is costly; bidding for the Richfield facility cost Spectrum \$8,000. Spectrum did not fare well for unidentified reasons. Mr. Snowden chose to abandon bidding PBPS projects for the state. On the other hands, rewards are high. Hogan Construction has been awarded 3 of 7 projects, suggesting competency and financial success on his procurement efforts. The contractors that are doing well are enthusiastic about PBPS. Looking at the bids on each project from subcontractors suggests that the contractors with the highest scores know that they will be selected. Price does not matter in PBPS, at least not until recently. Recently there have been changes to the mathematical matter to incorporate price, but only when it exceeds other factors by 100%. Mr. Snowden thought that aspect of PBPS is flawed and fails to act in the public interest. The risk of being required to absorb change orders is very high for the contractor. Mr. Snowden thought it unreasonable to ask to contractor to assume design responsibility given the short time span for bidding. He saw no way of improving the outcome of PBPS. Mr. Snowden was unclear as to how his performance was scored, not giving him a way to effectively determine the outcome.

The training focuses on theory. Mr. Snowden stated that he is running a business and does not care of the untested theories of others. He wished to know what it takes to land a project. Graphic content, presentation, and saying what the State wants to hear has been the basis of at least one of the awards he has been involved in. The scoring of management plans is shallow. PBPS placed emphasis in evaluating responses rather than how effectively the proposing firm can handle the project. There was difficulty in differentiating from one plan to the next and it seems more a battle of grammar and the number of correct responses rather than the ability to perform. From the owner's perspective, as Mr. Snowden has consulted DFCM on cost matters, the work is costly. Price does not matter. The low scoring subcontractors are adding very high mark-ups to their bids. Contractors have figured out the scoring process and deals are being made to improve individual ratings. Therefore good reliable information is not getting back to DFCM in all cases. Mr. Snowden knew personally of arrangements that are being made for individuals to give high scores to others. Risk is being passed back to the contractor in the present system. At what cost? Contractor relations with the State seem to have improved by PBPS, but the same contractor may be the low bidder down the street. Mr. Snowden suggested that the warm relationship as a Hawthorne effect. Change orders are minimized. Mr. Snowden cited that a DFCM employee a few years ago was managing 27 projects. Today another employee guessed he had between 50 and 60 projects he is responsible for today.

Mr. Snowden has been involved with a contractor who limits their project managers to two or three projects. There is no effective way a DFCM project coordinator can adequately represent the State of Utah handling 27 or even 60 projects. This is perhaps why cost overruns are as they are.

The chair appreciated Mr. Snowden's comments and seeks a report on his consulting relationship with DFCM.

Mr. Snowden preferred not to. He speaks as an individual and cites that he is no longer a paid consultant for DFCM.

The chair called for Dan Pratt of Herm Hughes and Sons.

REMARKS BY DAN PRATT

Mr. Pratt acknowledged the difficulty of Mr. Byfield's position. Mr. Pratt mentioned that Herm Hughes and Sons has competed in four solicitations under PBPS and, despite having the highest general contractor performance

rating and having the best score in all categories but one, Herm Hughes is still without a project. However, Herm Hughes affirms that PBPS is essential in the State of Utah. Rep. Adair spoke on point. Mr. Pratt mentioned that is essential for the contractor community to get together not to tell the Building Board what is wrong, but to propose a way to fix the problem. Dr. Kashiwagi has done a lot of research, consulting with political entities. Mr. Pratt proposes that now is the time to develop a working program. The proposition that PBPS only works with the contracting community is wrong. All stakeholders do not carry the risk of being assessed after project completion. The method of procuring design services needs to be different than that of contractors, but the feedback in the PBPS process needs to be present there.

There has been a concern that QBS is a beauty contest. The key is having the right pictures and answers and a number of firms in Mr. Pratt's contact mentioned they had little chance of doing State work. PBPS works for the A/E community. Design/build, privately negotiated work yields successful projects that win awards and are completed early and within budget. The contractor needs feedback in the selection process. Few know better which architects are performing than the contractor community. Mr. Pratt suggested that the system ought to be simplified. Reduce survey answers. Develop a master list of contractors and firms. Make contractor firms turn in reports on every architect they have worked with. Present an entire work history so that the selection process would no longer be a beauty contest. Mr. Pratt suggested the creation of a task force with five members each from the contracting community, the A/E community, the subcontracting community, a DFCM representative, and allow Dr. Kashiwagi to review the results of a system developed by the committee. PBPS is a step.

The chair thanked Mr. Pratt for his comments and invites Ron Reaveley, a structural engineer, to testify.

REMARKS BY RON REAVELEY

Mr. Reaveley mentioned that he has discussed PBPS on numerous occasions. Mr. Byfield and he have had many spirited conversations on the issue. He acknowledged that DFCM has tried to listen to and work with the community.

Mr. Reaveley argued that the selection process for architects and engineers should be different than the process for contractors. Contractors bid on a quantifiable definition. A/E take on a job without knowing the scope or intent of the design. This is the reason why QBS has been used to select A/E firms. QBS is even mandated by the federal government. There is no question that low-bid is detrimental to controlling cost and quality of construction. There is consensus that it needs to be replaced.

Mr. Reaveley suggested implementing a pre-qualification process to eliminate unqualified and non-performing contractors from future State projects.

The chair mentioned that, under the low-bid system, it would be difficult to remove the unqualified contractors.

Mr. Reaveley conferred. Mr. Reaveley participated on a QBS selection, spending six months refining the process. Two issues arose: there was an issue of not knowing how to perform. Checking references before the interviews is a must. There was even a process where different members of the selection committee would be assigned to call a number of references so that, before the interviews and the short list selection, references already had been made. Past performance was to be graded on contractors, architects, and engineers on every State project for use on future evaluation. Past performance should be part of the selection process and is part of QBS. The truth is that DFCM lacks the manpower to adequately do QBS, including references and ratings. If DFCM did that, selection processes would be better.

The chair asked if Mr. Reaveley has had direct experience with PBPS.

Mr. Reaveley has had direct experience. Performance line scoring for A/E firms is fatally flawed. The scores indicate grading inflation. At this rate, all scores will be artificially high and the model will not make any difference. Mr. Reaveley suggests using QBS for the procurement of A/E services and would like to see DFCM perform better at selecting well-qualified, high performing architects and engineers by checking qualifications and past performance. Mr. Reaveley would like to encourage the State Legislature to adequately fund DFCM so that they have enough staff to properly manage State projects.

The chair thanked Mr. Reaveley for his commentary and calls for Dale Brinkerhoff, facilities manager for Southern Utah University, to testify.

REMARKS BY DALE BRINKERHOFF

Mr. Brinkerhoff noted that SUU has been criticized for not accepting the low bid on the PE Building project. By process of value engineering, SUU is satisfied with the project. It is within budget and lacks change orders. SUU believes that they have a better project than they would have had with low bid. The process could be changed and tweaked, but is better than the other alternatives. PBPS allows a contractor to partner with the State, rather than be an adversary. Mr. Brinkerhoff was uncertain how to separate professional and contractor services as he considers Mr. Brinkerhoff considers contractors provide professional services, as well.

There are smaller projects that could be too small to fit under PBPS. The State needs an opportunity on lesser-value projects to still allow the contractors lacking performance histories to bid. He is unclear as to whether opposition to PBPS is due to a misunderstanding or fair disclosure. SUU was reluctant to be the second trial-case in the State for PBPS but they look forward to repeating it. Mr. Brinkerhoff believed that there are several advantages to PBPS.

- 1: Job history of the contractor.
- 2: Subcontractor performance bases are as important as the general contractor.
- 3: The project manager is involved. The committee has proof that the project manager understands the plans and the risk.
- 4: Maximum price is on the table and there is no leeway for exceeded price.
- 5: The entire workforce works with a team mentality.
- 6: The project is discussed weekly and on-site decisions are made.
- 7: The paper shuffle has diminished because the DFCM official has the charge to direct the workforce on-site.
- 8: Value engineering has been worth \$1.5 million.

The chair thanked Dale for the presentation. The chair refers to earlier testimony that there was a large error made in the construction process in not providing a drain line to the swimming pool. The chair asked for elaboration.

Mr. Frank McMenimen, program director of DFCM in charge of the SUU PE Project mentioned that during the design process, a connection was left out between the drain sump and the storm drain. That did not show up on the detailed drawing. Normally, that would have required a change order. Alternately, the plumber notified the team that the drawing was missing. The contractor handled the problem instead of approaching DFCM.

Mr. Hunter asked who made the mistake regarding the soils analysis.

Mr. McMenimen added DFCM discovered that the soil condition was more difficult than previously thought.

The chair asked for questions of Mr. Brinkerhoff.

The chair thanked Mr. Brinkerhoff for his testimony. The chair then stated that there seems to be enough experience in the construction end. There is less experience to make PBPS work well with the architect and engineer communities. It will take fine-tuning and effort. The chair thanked the effort of those firms who would be willing to help. The chair mentioned that he and the vice-chairman had to leave. The chair has asked Mr. Jenkins chair the meeting to conclusion. The chair suggested that DFCM arrange a teleconference as soon as possibly can be arranged. The Building Board agreed that a teleconference would be helpful.

Mrs. Ward mentioned that two customers spoke. The customers seemed to be happy with the product. The general consensus among the contractors is fairly positive. She noted that there are two constituents happy with PBPS. She acknowledged the criticality of working with the architects and engineers.

Mr. Byfield mentioned that that DFCM greatly appreciated the time and honesty in the process. DFCM did not express any trouble with what was said. It is a matter of working together. Mr. Byfield wanted to express at the beginning of the hearing is that there should be no fear or apprehension that there would be retribution in any form. He wanted to reinforce that DFCM feels the public hearing has been a positive experience.

There was some confusion as to what constituted a quorum. The remaining members of the Building Board satisfied the requirements for a quorum.

The chair invited Ken Louder of FFKR Architects to present his testimony.

REMARKS OF KEN LOUDER

Mr. Louder thanked the Building Board for their patience. Mr. Louder came to Utah with the intent to study to become an architect. He has practiced architecture in Utah since 1967. Mr. Louder expressed a concern that Dr. Kashiwagi's theory, no matter, how well intended, may be a version of syncretism in the intellectual sense. PBPS is untried. In Utah, far too often, like with syncretism and cold fusion, there is a tendency for, what H.L. Mencken described as "the simple answer to a complex problem, however it is always wrong." Mr. Louder is skeptical based on what he had heard and he believes that a fair amount of skepticism is warranted. This did not mean that the system could not be improved. Mr. Louder thought that there is in place a system that has not been used. It is not so much broken as not employed. There are rules in place for the selection of architects. Mr. Louder mentioned that it is too easy to go onto some better idea if it is felt that it works better, but not taking the time and deliberately evaluating and adopting the rule. Mr. Louder believes that the professional communities have been subjects of an experiment, however well intended. The same is true with the procurement of construction. Unfortunately, public policy does not allow architects to use what they know. Everyone in the A/E and contracting communities know who performs and who does not. Public policy does not allow the communities to preclude

from the bidding process those who would screw up projects. At the same time, the notion that everyone would get into a warm and fuzzy relationship with regard to the construction of buildings, is very misguided. Mr. Louder's only memory of an argument between his parents was over a light in the bathroom while their house was being built. Construction is a tension-producing activity that will always cost more than desire, will always be harder than desired, and the likelihood that everyone will get along is small. Changing the evaluation system to a number that will reduce the undesired effects and to make it easier to make a hard decision will not fix it.

Mr. Louder believed that the two-tiered procurement system used by private industry where contractors are evaluated based on objective performance as demonstrated are then allowed to provide low-bid numbers. Owners then need the courage to insist that contractors perform. The greatest challenge to architects are when they are unable to insist that the contract documents are not adhered to by contractors. When the owner refuses to support that, whether because of legal or political reluctance, the architects are unable to yield the buildings that are deserved.

With respect to Southern Utah University, it was referred to that the architect left out the swimming pool drain but that the performing contractor was going to make it all better. Actually, in the process of selecting via PBPS the contractor, a point was chosen by DFCM by which time no further information would flow from the architect to the contractor. In a normal process, addenda are distributed to the contractors and they are included in the bid. When it became known that the pool drains for the deck – not the main pool – were not on the pool. Something around \$45,000. FFKR was unable to relay formally the information to the contractors. It was portrayed that the architects messed up. Similarly, the printer for the documents left out a page. FFKR was unable to add the information. Mr. Louder does not know if the contractor will provide. Improvement is necessary, but Mr. Louder believes that the systems in place have been carefully developed over a long period of time and, if adhered to, will undoubtedly work better than they currently do.

The chair asked for questions and, receiving none, thanked Mr. Louder for his statement.

The chair invited Jim Smith with Heritage Roofing to present.

REMARKS OF JIM SMITH

Mr. Smith thanked the Building Board for allowing him to testify.

Heritage Roofing has been a contractor for the past 20 years. Mr. Smith stated that many of his planned statements have been made by prior presenters. Mr. Smith expressed his desire to point out problems with PBPS from a subcontractor's point of view. He first cited the rating of companies. The system as is, in the opinion of those bidding as contractors, means that the subcontractor with the best rating is the best subcontractor. Because of the way the information is received and evaluated, that is not necessarily the case. Mr. Smith understood DFCM's desire for quality construction and to get the most bang-for-the-buck. An example that fell short of DFCM's desire is the Richfield project, where most of the generals used the subcontractors with the highest rating in the effort to ensure that they get the project, as they were using the best people. Mr. Smith stated from a roofing standpoint is that it cost the State an additional \$80,000 for the roofing, which is approximately 40% of the project cost of the roofing. If that was reflecting in all of the subcontractor areas, that would mean that the whole project was \$40,000 over what it could have been by picking contractors that were very qualified to do the project but had a lower bid. Mr. Smith saw this is a problem with PBPS.

The number of years in the business is weighted very heavily in the rating system, suggesting a bias against younger companies. Another thing not taken into account with the rating system is a personal presentation of products, workmanship, management, or references from the subcontractors to the generals. There are a lot of good companies and PBPS would only allow the top one or two subcontractors to do all of the work, leaving out the many fine subcontractors that work in the State.

The chair asked for questions of Mr. Smith.

The chair expressed his appreciation to all participants. The problem had become abundantly clear in the public hearing and the Building Board is charged with finding the answer. The Building Board is responsible to start the procedure to find these answers.

The chair sought to adjourn the public hearing. The motion was made and seconded. The motion to adjourn passed.

The public hearing ended at approximately 4:30 p.m.